BPM SYSTEM WORK LIST SCHEDULE FY08 SHUTDOWN Last modified: May 30, 2008 (R. Michnoff)

Item	Description	Responsible	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09
1	HARDWARE Fix broken feedthroughs	Phil, Bob S., Tom, G. Mahler									
2	Complete investigation/repair of module failures	Phil, Bob S., Justin									
3	Analyze temperature effect on measurements, and develop methods for decreasing the effect.	Justin, Rob									
4	Determine if temperature affects timing delays	Justin, Rob									
5	Identify cause of measurement differences internal and external signals, determine feasibility of recalibrating with internal pulse when temperature is different from original external calibration, and characterize calibration variations variations over time	Justin, Rob									
6	Review calibration sequence – very fine delay timing, external cal, internal cal, etc.	Justin, Craig, Chris, Rob									
7	Test bad feedthroughs on the bench with test pulse and IFE electronics	Justin									
8	Turn-by-turn timestamp problem	Justin, Chris, Todd									
9	DATA INTEGRITY List known causes of bad data Specify/design sanity-checking plans	Michiko, Todd,									
10	Develop methods for identifying bad data (DSP, ADO, Manager, Applications) Consider orbit fit to help identify BAD data	Todd, Rob Bob, Justin									
11	Develop methods for ignoring and/or appropriatey displaying and tagging bad and suspect data (ADO, Manager, Applications)	Todd, Rob Bob O.									
12	HIGH-LEVEL SOFTWARE Complete RHICBpmProfileTiming one-button	Todd, Reid									
	fixed timing setup										
13	Design implement BPM system configuration management; record/restore timing values, etc Perhaps integrate into RhicBpmProfileTiming?	Todd									
14	Fix RhicOrbitDisplay fill 10k bug	Vadim									
15	Improve AtrOrbitDisplay (golden orbit, correction, G10/H10, etc)	Todd, Seth									
16	Address RhicOrbitDisplay improvement list. e.g. TBT/FFT displays, empty dirs created, select correction stones	Vadim									
17	Improve BPM system logging; stripcharts of	Todd, Ted?									

	BPMs in LogView?		1					
18	MANAGER SOFTWARE Add acquisition spacing, other parameters to orbit SDDS structure	Todd						
19	Add ON/OFF BPM TBT logging switch to RhicbpmManager	Todd						
20	Read beam intensity for selected BPM bucket from WCM and distribute on RTDL for auto-gain	n Todd						
21	LOW LEVEL SOFTWARE Configure spare Altera and DSP development systems	Justin						
22	Ensure that DSP code versions are stored in Clearcase for revision control	Justin						
23	Archive hardware and gate array firmware files with drafting	Justin, Craig						
24	Problem with operational ADO in lab system	Justin, Bob, Phil						
25	Design and implement running average orbit in DSP code	Justin						
26	Design and implement BPM TBT postmortem	Justin						
27	DSP profile timing steps not always equal Maybe change such that 60 150ps steps are used to fit into 3 2ns periods	Justin, Bob O., Rob						
	System Integration/Other							
28	Gate width may not be the expected value when narrow width is selected	Bob, Justin, Rob Chris						
29	Analyze physical position errors – identify if cause is related to survey data only, or if a component can be due to the electronics							
30	Try to determine why IFE resets are unsuccessful when beam is in the machine Test electronics using wire scanner test assembly							
31	Determine how (or if) we can guarantee that the same timing values are used from year to year.	Rob, Todd						
32	Determine if recalibration with external signal is required, and schedule this effort if deemed necessary	Justin, Phil, Rob						
33	Dedicated scope for DX BPM monitoring	Michiko, Rob, Chris? (for Vis)						
34	Integrated Tests	All						